

SSP215 POWERED SUBWOOFER

Owner's Manual



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TABLE OF CONTENTS

Overview.....	3
Technical Specifications.....	4
Frequency Response Graph.....	4
Photos & Dimension Drawings.....	5
Safety Information.....	6
Setup Instructions.....	7
Cardioid Setup.....	8
Troubleshooting.....	9
Warranty.....	9
FCC Compliance Notice.....	10

Need more assistance? Support is available via phone or email.

Email: support@bassboss.com

Phone: 855-822-7770 toll free

Web Site: www.bassboss.com

SSP215 POWERED SUBWOOFER

- Half the Size of the 218 Boxes
- Tall for Stacking Tops
- Low Profile – Under Stages or Low Ceilings
- Output Matches or Beats Most Double 18s
- Convenient Shape, Truck Pack for Touring



The BASSBOSS SSP215 Profundo Low-Profile Subwoofer delivers output to frequencies lower than many double 18" cabinets. It does so with nearly half the space and considerably less weight.

Ideal for the mobile professional who needs significant bass output but has limited transport space. The SSP215 will comfortably take the place of double 18" boxes without loss of output or diminished frequency range. For venues, the low-profile box can fit under the smallest of stages, and easily power full-on dance floors with full and punchy bass.

Providing massive output at and above 35Hz, reliably, consistently and with great fidelity. Feel the kick drum, and realize the power of dance tracks. Reproduce modern country, blues, rock, R&B and rap with a presence not felt from many double 18" subs.

The SSP215 is powered by a 2400W RMS amplifier. This is a continuous sine wave rating, not a peak, burst or EIAJ 8ms rating. Each 15" woofer has a 4" voice coil and a power handling rating of 1500W rms and 3000W program.

The smallest frontal dimension is only 17.5", making it very versatile for placement options. The SSP215 can fit under low stages, be flown in low ceilings and can be tucked in corners or between furniture where larger boxes would not fit. Its large dimension is 48", making it useful as a stack platform for getting the top boxes up above the audiences' heads. It's only 22.5" deep, making it a perfect truck-pack size.

Practically impossible to blow. The combination of extremely rugged, very high power handling, long excursion drivers, carefully optimized cabinet and port design and several effective but transparent protection systems. The protection systems effectively prevent thermal overload of the voice coils and minimize long-term thermal compression while having virtually no effect on the transient response and peak output of the loudspeakers.

It's tuned low, for use as a real subwoofer. With long-excursion, low distortion 15" woofers, and lower mass 15" cones it delivers the tight, punchy sound as well as deep, rolling bass.

Extremely flat, delivering response that is $\pm 3\text{dB}$ from 35Hz to 100Hz. No equalization is required to achieve this response. Unlike designs that require equalization, the SSP215's tone, response and sensitivity are native to the design. Systems that require processing to achieve their stated response are still subject to the physical excursion and thermal limits of their drivers. Boosting low frequency EQ to achieve extended low-frequency response results in excessive distortion or woofer damage at full power unless limiting is applied. The limiting necessary to prevent failure also prevents the realization of their claimed frequency response at full power. The SSP215 does not suffer from these limitations. It faithfully delivers the low bass where most others either fade or fail.

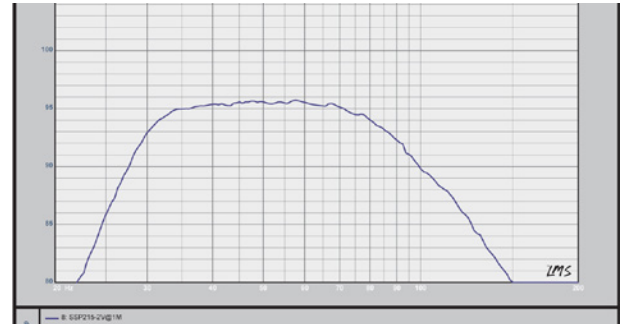
Versatile and Durable. Finished in extremely tough black textured weatherproof polyurethane coating, with a top-mounted pole socket, the SSP215 provides for mid-high loudspeakers to be mounted on a straight speaker pole above the subwoofer. The enclosures also feature four large rubber feet and corresponding recesses in their tops to facilitate interlocking the boxes when stacked. The woofers' cones are made from a waterproof fiber matrix.

Engineered to work hard and continue to work where others fail. The BASSBOSS warranty provides 6 years of coverage against defects in materials and workmanship. The warranty DOES cover failed drivers, including burned voice coils, for 2 years from the date of purchase. If a voice coil, or anything else, fails within the warranty period, replacement parts will be provided without charge. (See warranty documentation for complete details).

ACOUSTICAL

Loudspeaker Description:	Double 15" Subwoofer
Frequency Response (± 3 dB):	35-100Hz
Maximum Sustained Output:	129 dB SPL, 1m, 2pi, half-space, (ground stacked)
Max SPL (Peak)*	140 dB
Nominal Dispersion ($^{\circ}$ H x $^{\circ}$ V):	360 x 360 - Cardioid mode available with multiple boxes

RESPONSE GRAPH



ELECTRICAL

Amplification:	2400 Watt Continuous RMS Class D Amplifier
Processing:	Integrated Comprehensive DSP for HP, LP and Limiting
Electrical Connectors:	Neutrik Powercon
Electrical Connector, Mains:	Standard US 3-pin 120V electrical plug: NEMA 5-15.(Edison) Optional electrical plugs available, including L5-30 and others, on request.
Voltage Operating Range:	90-130V
Current Draw, Nominal:	3A @ 120 volts (typical, 1/8 max power)
Signal Input Connector:	XLR-F
Signal Output Connector:	XLR-M pass-through only

PHYSICAL

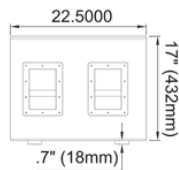
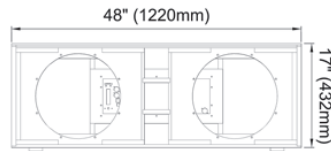
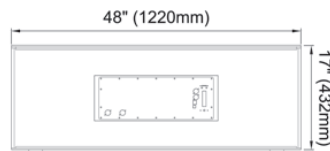
Enclosure Type:	Direct radiating, vented enclosure, optimally tuned for low frequency response with high sensitivity and high power handling
Transducer:	2 x 15 " dia (380 mm) neodymium motor woofer with 4" (100mm) copper winding voice coil and 46mm peak to peak excursion. Waterproof fiber composite cone
Dimensions (HxWxD):	17.25" x 48" x 22.5"
Net Weight:	165 lbs
Shipping Weight:	176 lbs
Exterior Finish:	Weatherproof bonded high-pressure polyurethane
Grill:	Perforated, powder-coated steel

OPTIONAL

Suspension System:	16x 3/8-16 threaded flypoints
Cover:	Heavy-duty padded nylon transport cover
Dolly Cart:	Rolling cart with 4 locking casters
Compatible Top Boxes:	BASSBOSS BOSSMon Monitors and Attuned Tops
Online Information:	bassboss.com/ssp215

**Peak output is calculated using "industry standard" techniques. These calculation methods create theoretical specifications that are inflated over what can actually be achieved. BASSBOSS real world output specifications are provided as "Maximum Sustained Output" ratings, which reflect actual measured, continuous output levels.*

Our proactive philosophy causes specifications to be subject to change whenever improvements are made.



SAFETY INFORMATION

Important information regarding safety and the use of your loudspeakers:

Never stand in the immediate vicinity of loudspeakers driven at a high level. Professional loudspeaker systems are capable of causing a sound pressure level detrimental to human health. Seemingly non-critical sound levels (from approx. 95 dB SPL) can cause hearing damage if people are exposed to it over a long period. To prevent potentially dangerous exposure to high levels of acoustic pressure, anyone who is exposed to these levels should use adequate protection devices.

When a transducer capable of producing high sound levels is being used, it is therefore necessary to wear ear plugs or protective earphones.

See the manual technical specifications to know the maximum sound pressure level.

In order to prevent accidents when setting up the loudspeakers or loudspeaker stands, make sure they are standing on a firm surface.

Ensure that all additional hardware, fixings and fasteners used for installation or mobile deployment are of an appropriate size and load safety factor.

Pay attention to the manufacturers' instructions and to the relevant safety guidelines.

Regularly check the loudspeaker housings and accessories for visible signs of wear and tear, and replace them when necessary.

Regularly check all load bearing bolts in the mounting devices.

Caution: Loudspeakers produce a static magnetic field even if they are not connected or are not in use. Therefore make sure when erecting and transporting loudspeakers that they are nowhere near equipment and objects which may be impaired or damaged by an external magnetic field. A distance of 3 feet (1m) should be maintained between loudspeakers and sensitive equipment such as CRT monitors or magnetic storage media.

Never attempt to carry out any operations, modifications or repairs that are not expressly described in this manual.

Contact your dealer or BASSBOSS support if the product is not functioning properly.

BASSBOSS strongly recommends this product be installed by a qualified, professional installer who can ensure correct installation and certify that it is installed in compliance with the regulations in force.

The entire audio system must comply with the current local standards and regulations regarding electrical systems.

IMPORTANT NOTES

To prevent the occurrence of noise on signal cables, use shielded cables only. Avoid routing signal cables close to equipment that produces high-intensity electromagnetic fields such as transformers, power cables and loudspeaker wires. Do not coil excess power cable. Do not coil or wrap power cables and signal cables together.

SET UP INSTRUCTIONS

1. Place loudspeaker in the desired location. Ensure that it is secure and stable.
2. Rotate the input attenuator knob counterclockwise to the lowest setting.
3. Connect signal from the sound source (mixer) via the XLR female input jack.
4. Connect the XLR male output to the next available loudspeaker input via an XLR cable (if applicable.) This is a full-range pass-through connection and no processing is applied to this output.
5. Connect the Neutrik PowerCON (blue) connector to the blue power inlet socket. Do not force. To insert, align the indexing tabs on the connectors, insert the plug fully into the socket and rotate clockwise until the latches catch. To remove, pull back on the latch tab and rotate the connector counterclockwise to the index stop, then pull outwards.
6. Work backwards from the speakers to the outlets, making all PowerCON connections before plugging in to mains power.
7. Connect the electrical plug to a power source.
8. Move the POWER switch to the ON position.
9. Rotate the input attenuator clockwise to achieve the desired sound level.

The integrated DSP includes all the required processing for safe operation and alignment with the accompanying BASSBOSS top boxes. It is not necessary nor advisable to use any third-party outboard processing with BASSBOSS powered loudspeakers. When connecting multiple BASSBOSS loudspeakers in a system, signal can be passed through from one powered loudspeaker to another using XLR cables. No processing is applied to the signal as it passes through from the input to the output connectors in each loudspeaker. Signal can be routed in any sequence because each loudspeaker receives a full-range signal and applies the necessary processing in order to operate as part of the overall system. It is recommended to run signal to the nearest box first and patch to the next nearest box in sequence. When connecting BASSBOSS speakers in a system including other brands of loudspeakers, it's recommended to connect the BASSBOSS speakers first in sequence, then connect other speakers to the pass-through outputs. This ensures that no inappropriate processing is applied to either loudspeaker.

The typical power draw of one BASSBOSS 2400W amplifier module is approximately 5A. With heavy demand, the current draw can peak at 20A for brief periods but under NEMA code, a 20A breaker should sustain a peak draw of 40A for several seconds without tripping.

It's recommended to connect no more than two 2400W amplifier to an individual 20A circuit. In situations where circuits must be shared with other equipment or other brands, it's recommended to power combinations of a BASSBOSS subwoofer and a top on a circuit and to power each subwoofer and top combination on a separate circuit to reduce the chances of overdrawing a circuit and tripping a breaker.

OPERATION and CONTROLS

There are 2 control knobs on the amplifier.

1: GAIN

Provides attenuation of the input from off to full output. Use appropriate gain structure to ensure the output feeding the subwoofer doesn't reach clipping and distortion before maximum desired sound level is achieved.

The amplifier has a complement of limiters and safeties to protect itself and the driver however, if audible distortion occurs, lower the level of the incoming signal.

2: EXO ADJUST

This control adjusts the effective crossover frequency allowing the subwoofer to be used with multiple sizes and styles of top boxes while minimizing out-of-bandwidth noise and phase shift in the crossover region. Rotating the EXO knob fully counterclockwise (left) results in an effective crossover frequency of 80Hz. Rotating it fully clockwise (right) results in an effective crossover frequency of 100Hz.

3: CARDIOID SWITCH

Toggle Switch allows selection between NORMAL mode and CARDIOID mode.

With the switch in the NORMAL (up) position, the speaker is in normal operating mode and any number of cabinets can be arrayed side-by-side facing the same way when they are all in NORMAL mode.

When CARDIOID operation is desired, one or two cabinets must be used in NORMAL mode and at least one cabinet must be placed in CARDIOID mode and its position reversed relative to the other cabinet(s). The ideal ratio is 2 cabinets in NORMAL with one CARDIOID cabinet between them vertically or horizontally.

Reduced	NORMAL >>	Audience
Level	<< CARDIOID	Audience
Area	NORMAL >>	Audience

The NORMAL mode cabinet(s) are used with the woofer facing towards the audience. The CARDIOID mode cabinet is rotated with the woofer away from the audience and the CARDIOID SELECT SWITCH in the CARDIOID (down) position.

The cabinet in CARDIOID mode should have the EXO knob at the lowest level, rotated fully counterclockwise.

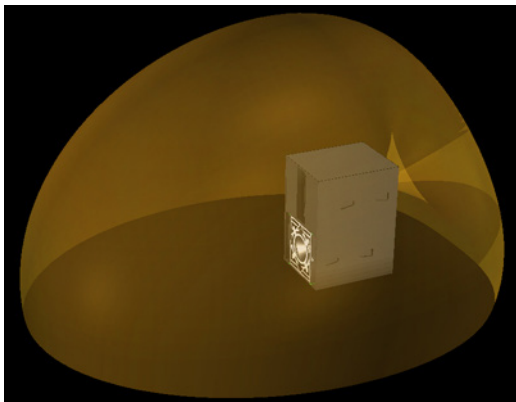
The EXO setting on the NORMAL mode cabinet(s) can be set to taste but all cabinets in NORMAL mode should be set the same.

Note: When the speaker is in CARDIOID mode, the green PWR LED is disabled because it will be facing the audience.. The speaker will still power up and play.

When only two cabinets are used, the cabinet in CARDIOID mode can be placed on top of the cabinet in NORMAL mode. The cabinet in CARDIOID mode can also be placed adjacent to the NORMAL mode cabinet, with the NORMAL mode cabinets placed farther from the stage or area where reduced level is desired. When only 2 cabinets are in use, the CARDIOID mode cabinet GAIN should be reduced by 3dB. The greatest level reduction occurs on axis with a line drawn from the center of the NORMAL cabinet's baffle, through the center of the CARDIOID cabinet's baffle.

Reduced		
Level	<< CARDIOID (-3dB)	Audience
Area	NORMAL >>	Audience
		Audience

Three-dimensional representation of cardioid output pattern.



TROUBLESHOOTING

If, after following the above instructions for setup, you have no output from the loudspeakers, please check the following:

Verify that the green power (ON) LED is lit. If not, check the following:

(Note: The ON LED is disabled when CARDIOID mode is selected. To check for power, switch to NORMAL mode to illuminate the LED)

1. Is the power cord plugged into a live outlet?
2. Is the Neutrik PowerCON connector rotated into the locked position?
3. Is the Power Switch on?

If the green power LED is on, check the following:

1. Is the signal cable connected to the input?
2. Is the signal cable connected to an operating output at the other end?
3. Is the signal flowing to the input? Check the integrity of the cable.
4. Is the attenuator turned all the way down or at a very low level?
5. Is the signal flowing to the input full-range? Filters in the signal may remove the operating frequencies of the loudspeaker receiving them.

FLASH SEQUENCE CODES FOR WARNING INDICATORS AND PROTECTION MODES

(Seen on Amp LED)

Long flashes followed by short flashes:

- 1-0 **GROUND NOT CONNECTED:** Amp still runs. Blinks 10 times on power-up then stops. Check power cord and outlet wiring.
- 1-1 **LINE HOT AND NEUTRAL REVERSED:** Amp still runs. Blinks 10 times on power-up then stops. Check power cord and outlet wiring.
- 1-2 **GROUND NOT CONNECTED IN 240V MODE:** Amp still runs. Check power cord and outlet wiring.
- 2-0 **GFI TRIP:** Amp shuts down. Power cycle to restore.
- 3-0 **OVERHEAT SHUTDOWN:** Amp shuts down. Restarts when temperature falls.
- 3-3 **THERMAL LIMITER ACTING:** Gain reduced to limit heat buildup. Amp still runs.

- 4-1 **FAULT FROM GATE PCB WHILE AMP WAS WORKING:** Amp shuts down. Service Required.
- 4-2 **FAULT FROM PFC:** (240V option only) Amp shuts down. Service Required. (May reset with power cycle if false triggered.)
- 4-3 **GFI MALFUNCTION:** Amp shuts down. Service Required.
- 4-5 **FAULT FROM GATE PCB:** Amp shuts down. Service Required.
- 4-7 **BROWNOUT AT POWER-UP:** Amp shuts down. Power Cycle to restore. Check supply Voltage.
- 4-8 **UNABLE TO START AMPLIFIER:** Power Cycle to restore. Check or eliminate power conditioner.
- 5-0 **OVER-VOLTAGE:** Amp turns off or won't start. (Seen on 120V versions when connected to 240V outlets.)
- 6-0 **UNDER-VOLTAGE:** Amp turns off or won't start. (Seen when Generators are overdrawn or long extension cords are in use.)
- 6-6 **LINE LIMTER ACTING:** Amp still runs. Output reduced to limit current draw.

Need more assistance? Support is available via phone or email. Email: support@bassboss.com
Phone: 855-822-7770 toll free. Web Site: www.bassboss.com

Thanks for your BASSBOSS purchase!

WARRANTY INFORMATION

Beyond ensuring your satisfaction, our extensive "Sound Defense" transferable warranty which covers all BASSBOSS products.

STANDARD CABINET WARRANTY

BASSBOSS loudspeaker cabinet integrity, including all joinery, fasteners, handles and wood, is warranted against defects in materials and workmanship for a period of six years from the date of purchase. This warranty does not cover items that are intended to wear and can be replaced if worn or damaged. Examples of items not covered by this warranty are cabinet feet, grills and the finish or coating applied to the cabinet.

ENHANCED COMPONENT WARRANTY

BASSBOSS self-powered loudspeaker amps and electronic components are covered against failures due to defects in materials and/or workmanship for a period of three years from the date of purchase. Speaker drivers and burned or open voice coils in subwoofers are covered for two years.

OUR SUPPORT

It is our goal to provide trouble-free loudspeakers. That objective begins as part of the design phase and continues on through to any service you may require. In order to be able to provide the lowest possible failure rate, the best possible warranty service and the fastest turn-around time, we request that you contact us immediately if you notice any problem with your system, and before you attempt any repairs. We can provide the best and fastest solution if we know the details of the problem before any repair attempts are made. Often BASSBOSS technicians can troubleshoot problems that may arise and no repair or further service will be necessary.

Warranty support is a service, and part of that service includes helping you prevent failures and minimize repair and shipping costs. Please do not ship products without first obtaining a return authorization number by calling 855-822-7770 toll-free or by emailing support@bassboss.com. BASSBOSS service technicians will provide assistance and instructions on shipping and packaging requirements specific to your service needs.

WARRANTY LIMITATIONS

During the warranty period, if your loudspeaker malfunctions or fails due to any defect in components or manufacturing, the failed parts will be repaired or replaced. This warranty does not extend to damage resulting from improper installation, misuse, neglect or abuse. Warranty coverage will be determined upon inspection by BASSBOSS personnel. This warranty does not cover labor other than that authorized and performed by BASSBOSS personnel. Service will be performed upon the return of the failed unit, together with its original sales receipt or other proof of purchase, to BASSBOSS or an Authorized Service Facility. Purchaser is responsible for all costs of shipping and handling. Cosmetic damage is specifically excluded from this warranty. This warranty is rendered void if service, repairs and/or modifications are attempted or made by anyone not specifically authorized by BASSBOSS to perform said services. Please contact BASSBOSS or your local BASSBOSS dealer before attempting any repairs and before shipping parts in for service.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For more information concerning BASSBOSS service and warranty policies please contact us at (855) 822-7770 toll-free.

EXPORT WARRANTY

BASSBOSS products can be purchased worldwide. In countries without local BASSBOSS distributors, product requiring service must be shipped back to the US for warranty repairs. In most cases, the entire cabinet will not need to be shipped. Generally only the individual affected parts will need to be shipped to the factory for servicing. Please contact BASSBOSS before attempting any repairs and before shipping parts in for service.

SHIPPING AND PACKAGING

Please package your returns safely and securely. BASSBOSS does not cover damage that occurs in transit. Freight insurance is recommended.

FCC COMPLIANCE NOTICE

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.